

Credit Name: CSE 2110 Procedural Programming 1

Assignment Name: Add Coins Mastery

How has your program changed from planning to coding to now? Please explain?

PLANNING:

I plan to create a main method that will prompt the user for the amount of quarters, dimes, nickels and pennies. These values will be stored in separate variables. Then, in a separate method, the dollar value of all of the coins will be calculated, and displayed to the user.

CODING:

1.

```
Scanner userInput = new Scanner(System.in);

//prompting the user for the amount of each type of coin

System.out.print("Enter amount of quarters:");
int quart = userInput.nextInt(); // stores # of Quarters entered by user

System.out.print("Enter amount of dimes:");
int dimes = userInput.nextInt(); // stores # of Dimes entered by user

System.out.print("Enter amount of nickels:");
int nicks = userInput.nextInt(); // stores # of Nickels entered by user

System.out.print("Enter amount of pennies:");
int pens = userInput.nextInt(); // stores # of Pennies entered by user
```

Scanner is set for user input

User is prompted to enter the amount of quarters, dimes, nickels, and pennies.

These values are stored in the quart, dimes, nicks, and pens variables.

2.

```
//Calculating the dollar amount using the getDollarAmount method
String TotalAmount = getDollarAmount(quart, dimes, nicks, pens) ;
```

The dollar amount is calculated and stored in the TotalAmount String using the getDollarAmount method which uses the variables mentioned in the last step.

3.

```
// getDollarAmount method calculates dollar amount and prints it with a $ sign and as a
}
public static String getDollarAmount(int quart, int dimes, int nicks, int pens) {

    // calculate the value of coins in dollars
    double total = (quart * 0.25) + (dimes * 0.10) + (nicks * 0.05) + (pens * 0.01);

    // total amount is rounded to 2 decimal places and $ sign is added
    return String.format("$%.2f", total);
}
```

This is the method getDollarAmount.

The value is calculated by multiplying the amount of quarters, dimes, nickels, and pennies with their money value, and then adding all the values up. This total is then formatted to have the \$ in front of it, and is also rounded to two decimal places.

4.

```
// prints total Dollar amount
System.out.println("Total:" + TotalAmount);
```

Finally, the system prints the total dollar amount for the user.

End of Program!